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(21)Application number : 2002-218541 (71)Applicant : JFE STEEL KK

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(54) STEEL PIPE HAVING EXCELLENT WORKABILITY AND PRODUCTION METHOD THEREFOR

(57)Abstract:

PROBLEM TO BE SOLVED: To provide a high strength steel pipe for an automobile structural member which has a high strength satisfying a tensile strength of >580 MPa, and has excellent processability, and to provide a production method therefor.

SOLUTION: A steel pipe material having a composition containing 0.05 to 0.30% C, 0.01 to 1.0% Si, 1.0 to 4.0% Mn, 0.005 to 0.10% Al, and $\leq 0.003\%$ S is heated, and is subjected to soaking treatment. After that, the steel pipe is subjected to reduction rolling at a rolling finishing temperature of 400 to $<800^{\circ}$ and a cumulative reduction ratio of $\geq 20\%$ to form into a product pipe. Thus, the steel pipe has a tensile strength of >580 MPa as-rolled, and a yield ratio of $\geq 70\%$, and its yield stress remarkably increases after the heat treatment at 150 to 300°C for 10 to 20 min, so that the yield ratio reaches $\geq 80\%$. Further, one or two kinds selected from Cu, Ni, Cr, Mo, Nb, Ti, and B and/or one or two kinds selected from rare earth metals and Ca can further be